



PTO/SB/08A (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 1 of 1

Complete if Known

Application Number	10/822,445
Filing Date	April 12, 2004
First Named Inventor	David S. Breed
Art Unit	3662
Examiner Name	
Attorney Docket Number	ITI-002

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
m		US- 5,617,317	4/1997	Ignagni	
		US- 5,760,737	6/1998	Brenner	
		US- 5,890,083	3/1999	Franke	
		US- 5,926,117	7/1999	Gunji	
		US- 5,983,161	11/1999	Lemelson	
		US- 6,014,608	1/2000	Seo	
		US- 6,311,129	10/2001	Lin	
		US- 6,370,475	4/2002	Breed	
		US- 6,405,132	6/2002	Breed	
		US- 6,453,238	9/2002	Brodie	
		US- 6,459,990	10/2002	McCall	
		US- 6,516,273	2/2003	Pierowicz	
		US- 6,560,535	5/2003	Hohman	
		US- 6,768,944	7/2004	Breed	
		US- 2003/0025597	2/2003	Schofield	
		US- 2003/0112132	6/2003	Trajkovic	
		US- 5,841,367	11/1998	Giovanni	
		US-			
		US-			

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				
m		WO 01/50088	7/2001	Levy		

Examiner
Signature

m f

Date
Considered

9/20/05

*EXAMINER: Initial if references considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 2 of 4**Complete if Known**

Application Number	10/822,445
Filing Date	April 12, 2004
First Named Inventor	David S. Breed
Art Unit	3662
Examiner Name	
Attorney Docket Number	ITI-002

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
<i>m</i>		US- 3,702,477	11/1972	Brown	
		US- 5,177,685	1/1993	Davis	
		US- 5,332,180	7/1994	Peterson	
		US- 5,381,338	1/1995	Wysocki	
		US- 5,504,482	4/1996	Schreder	
		US- 5,570,087	10/1996	Lemelson	
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				

Examiner
Signature*m + L.O.G.*Date
Considered*8/20/05*

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)		Complete if Known	
		Application Number	10/822,445
		Filing Date	April 12, 2004
		First Named Inventor	David S. Breed
		Art Unit	3662
		Examiner Name	
Sheet 3 of 4	Attorney Docket Number		ITI-002

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
<i>m</i>	1	SRI International Centimeter- Level GPS for Highway Systems, J.W. SINKO et al. Jul., 1998.	
	2	SRI International, An Evolutionary Automated Highway System Concept Based on GPS, J.W. SINKO, Sep., 1996 (p. 5, second column to p. 7).	
	3	SRI International Using GPS for Automated Vehicle Convoying, T.M. NGUYEN, Sep. 1998.	
	4	V. MORALLES et al., Preview Based Control of a Tractor Trailer Using DGPS for Preventing Road Departure Accidents, 1998 IEEE International Conference on Intelligent Vehicles,	
		pp.797-805.	
	5	S. BAJIKAR et al., Evaluation of In-Vehicle GPS-Based Lane Position Sensing for Preventing Road Departure, 1998 IEEE International Conference on Intelligent Vehicle,	
		pp.307-402.	
	6	B. SCHILLER et al., Collision Avoidance for Highway Vehicles Using the Virtual Bumper Controller, 1998 IEEE International Conference on Intelligent Vehicles, pp. 149-155.	
	7	M. O'SHEA and V. SHUMAN, Looking Ahead: Map Database in Predictive Positioning and Safety Systems, no Date.	
<i>m</i>	8	J. PIEROWICZ, Use of Map Data Information in an On-Board Intersection Violation Detection System, 1998 IEEE.	

Examiner Signature	<i>m</i>	Date Considered	9/20/08
--------------------	----------	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)		Complete if Known	
		Application Number	10/822,445
		Filing Date	April 12, 2004
		First Named Inventor	David S. Breed
		Art Unit	3662
Examiner Name			
Sheet 4	of 4	Attorney Docket Number	ITI-002

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
<i>mw</i>	9	GORAN M. DJUKNIC and ROBERT E. RICHTON , Geolocation and Assisted GPS, Feb, 2001.	
<i> </i>	10	H. WEINBERG, MEMS Sensors Are Driving the Automotive Industry, Sensors, Feb. 2002	
<i> </i>	11	R. GRACE, The Growing Presence of MEMS and MST in Automotive Applications, Sensors, Sep. 1999.	
<i>mw</i>	12	D. SINGH et al., Autonomous Vehicle Using WADGPS, Proceedings of Intelligent Vehicles '95 Symposium, Sep. 25-26, 1995, pp. 370-375.	

Examiner Signature	<i>[Signature]</i>	Date Considered	9/20/05
--------------------	--------------------	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.